PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTION OF A NEW RACE OF THE WESTERN GULL

BY JONATHAN DWIGHT, M. D.

The breeding range of the Western Gull is singularly long and narrow, extending north and south some 1.500 miles along the Pacific Coast, but it is scarcely wider than the rocky islands lying off the coasts of Washington, Oregon, California and Lower California which the birds frequent. It is therefore not at all surprising that it is separable into two races, the southern one having a darker mantle with less gray on the primaries. Audubon described Larus occidentalis in 1839 from two specimens sent him by his friend, Dr. J. K. Townsend, one an adult male, the other an immature bird at least a year old, both taken at Cape Disappointment, mouth of the Columbia River, Washington, October 7th and 6th respectively, 1836. The type was once in the U.S. National Museum collection, No. 2767, so I am informed by Dr. Chas. W. Richmond, but it can not be found there to-day; hence Audubon's description must determine which of the two races he had in hand. It is perfectly evident that he did not have the dark southern race, for although his description is faulty in some respects it fits fairly well the birds that breed to-day on the islands off the coasts of Washington and Oregon. Therefore it is the southern race with the dark mantle that requires a new name.

Larus occidentalis livens, subsp. nov.

Type, & adult, No. 3378, L. C. Sanford collection, San Jose Island, Lower California, April 26, 1912. Collected by W. W. Brown, Jr. Wing, 420 mm.; tail, 165; tarsus, 70; middle toe without claw, 62; culmen, 55; depth of bill at base, 21; at angle, 22.

Subspecific characters.—Similar to Larus occidentalis occidentalis, but mantle a darker plumbeous or deep neutral instead of plain neutral gray and usually four outer primaries, instead of two, black basally without gray areas.

Description.—Pure white except mantle and wings. Head, neck, lower parts, tail, its coverts, lining (except for cinereous primary coverts) and edge of wing, tips of primaries, secondaries and tertiaries and a mirror on first primary white; mantle including whole outer surface of wing and primary coverts dark plumbeous to neutral gray; four outer primaries black, the fifth showing gray wedges on both webs nearly to tip, with the black reduced to a subterminal band on sixth, and the gray paler, remaining primaries gray with broad white tips. Bill (in life) lemon yellow with a red spot on lower mandible between angle and tip. Tarsi and feet (in life) lemon yellow. Iris, hazel-brown.

Measurements (in millimeters).—Male (10 adults): wing, 402-445 (416); tail, 154-167 (162); tarsus, 67-72 (69); middle toe without claw, 58-62 (60); exposed culmen, 52-59 (55); depth of bill at base, 18-22 (20); at angle, 20-23 (21).

Female (8 adults): wing, 380-395 (389); tail, 147-153 (150); tarsus, 61-65 (63); toe, 52-58 (55); culmen, 46-53 (50); depth at base, 16-18 (17); at angle, 18-20 (19).

Remarks.—While upwards of fifty specimens of the two races have been examined, so many of them are either young, not fully adult, in moult, unsexed or evidently wrongly sexed by inaccurate collectors that not more than two-thirds of this material is wholly satisfactory. With a larger series from southern localities, livens may prove to be a somewhat larger race, although specimens of typical occidentalis from Oregon are quite as large as the few birds examined from Lower California.

The race livens is found breeding on both coasts of Lower California, the Santa Barbara Islands and north to the Farallon Islands. Specimens from the Farallones are fairly typical while, on the other hand, a bird taken on July 20 at Trinidad, California, is the pale-mantled occidentalis, like those from still farther north.

There are reasons for suspecting that Audubon's specimens of occidentalis were Herring Gulls, possibly veg x, but it would be difficult to prove this. His characters of bill, color of mantle and iris and pattern of primaries fit livens, although the larger size and flesh-colored feet suggest veg x. Both forms of occidentalis have yellow feet (the tarsus of the type of livens is recorded by the collector as "lemon yellow") but the color of feet in the gulls has caused endless trouble and it is unsafe to draw conclusions from dried specimens as to what the color was in life. It seems to me the discrepancies in Audubon's description do not justify the discarding of his name occidentalis for the Western Gull. Apparently Schlegel (Mus. Pays-Bas, VI, 1863, p. 15) was the first writer to correctly describe the species as having yellow feet.

In the natal down, juvenal, first winter and first nuptial stages of plumages

the two races are hardly to be distinguished although occasionally at the first prenuptial moult a few tell-tale gray feathers may appear in the mantle. At the first postnuptial moult, the wholly brownish-black primaries of the first winter are reassumed as well as much of the brown, mottled plumage of the body and wing surfaces, but there are usually more or less gray feathers of the mantle which are diagnostic of the race to which the specimen belongs, and the tail as a rule has more white in it: the black bill of the first winter has now become partly pale basally and the whole bird is noticeably whiter in the second winter plumage. At the second prenuptial moult much of the white plumage of the head, neck and lower parts is assumed and more gray creeps into the mantle, so that some specimens resemble adults except for the wings and tail. There is no evidence that any birds at the first postnuptial moult acquire the jet black primaries with white tips and a white sub-terminal spot or mirror on the distal primary, but nearly all individuals seem to acquire them at the second postnuptial. Therefore birds in their third winter may be considered as fully adult although some of them may show evidences of immaturity by primaries with small or imperfect mirrors and by tailfeathers touched with black. The size and shape of the mirror on the distal varies greatly in adults and sometimes a small spot develops on the next.